U.S.S.N.: 09/854,204

-2-

Group Art Unit: 1642

## Amendments to the Claims:

This listing of claims will replace all prior version, and listings, of claims in the application.

## Listing of Claims

- 1. (Currently Amended) A membrane translocation peptide carrier moiety emprising consisting of formula;
  - (a) RRMKWKK (SEQ ID NO: 2)

#### or a variant thereof, wherein

- (b) SEO ID No 2, wherein one or more amino acid residues are replaced by a naturally or non-naturally occurring amino acid residue;
- (c) SEQ ID No 2, wherein the order of one or more amino acid residues are reversed:
  - (d) SEQ 1D No 2, wherein both (b) and (c) are present together;
- (e) SEQ ID No 2, wherein a spacer group is present between any two amino acid residues;
- (f) SEQ ID No 2, wherein one or more amino acid residues are in peptoid form;
- (g) SEQ ID No 2, wherein the (N-C-C) backbone of one or more amino acid residues of the peptide carrier moiety has been modified; or
  - (h) SEQ ID NO:2, having any of (b)-(g) in combination

Claims 2-48 (Canceled)

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U.S.S.N.: 09/854,204

-3-

Group Art Unit: 1642

49. (Previously Presented) A carrier moiety according to claim 1, wherein one or more amino acid residues are replaced by homologous replacement.

### 50. (Canceled)

51. (Previously Presented) A carrier moiety according to claim 1, wherein one or more amino acid residues are replaced by non-homologous replacement.

# 52. (Canceled)

- 53. (Currently Amended) A carrier moiety according to any of claims 47 to claim 51, wherein the replacement amino acid is a non-natural amino acid selected from the group consisting of: alpha\* and alpha-disubstituted\* amino acids, N-alkyl amino acids\*, lactic acid\*, halide derivatives of natural amino acids-such as trifluorotyrosine\*, p-Cl phonylalanine\*, p-Br phonylalanine\*, p-I phonylalanine\*, L-allyl-glycine\*, β-alanine\*, L-α-amino butyric acid\*, L-γ-amino butyric acid\*, L-α-amino isobutyric acid\*, L-ε-amino caproic acid\*, 7-amino heptanoic acid\*, L-methionine sulfone\*, L-norleucine\*, L-norvaline\*, p-nitro-L-phenylalanine\*, L-hydroxyproline\*, L-thioproline\*, and methyl derivatives of phenylalanine (Phe) such as 4-methyl Phe\*, pentamethyl Phe\*, L-Phe (4-amino)\*, L-Tyr (methyl)\*, L-Phe (4-isopropyl)\*, L-Tic (1,2,3,4-tetrahydroisoquinoline-3-carboxyl acid)\*, L-diaminopropionic acid \* and L-Phe (4-benzyl)\*, wherein the notation \* indicates that the derivative is hydrophobic nature of the derivative, the notation \* indicates the hydrophilic nature of the derivative, and the notation \*\* indicates amphipathic characteristics.
- 54. (Currently Amended) A carrier moiety according to claim 1, wherein the order of the second and third amino acids from the C-terminal end of the peptide are is reversed.
- 55. (Previously Presented) A carrier moiety according to claim 1, wherein a spacer group is present between any two amino acid residues, and the spacer group is an

Aug-15-03 18:06

U.S.S.N.: 09/854,204

Group Art Unit: 1642

alkyl group.

- 56. (Previously Presented) A carrier moiety according to claim 55, wherein the alkyl group is selected from the group consisting of methyl, ethyl and propyl groups.
- 57. (Previously Presented) A carrier moiety according to claim I, wherein a spacer group is present between any two amino acid residues, and the spacer group is an amino acid residue.
- 58. (Currently Amended) A carrier moiety according to claim 57, wherein the spacer group is selected from the group consisting of glycine ex and β-alanine.
- 59. (Previously Presented) A carrier moiety according to claim 1, wherein one or more amino acids are in peptoid form.
- 60. (Currently Amended) A carrier moiety according to claim 1, wherein one or more amino acid residues at any of positions 1, 2, 3, 5 or 6 or 7 of said formula (SEQ ID No. 2) are replaced by a naturally or non-naturally occurring amino acid.
- 61. (Currently Amended) A carrier moiety according to claim 1, wherein the order of one or more amino acid residues at any of positions 1, 2, 3, 5 or 6 or 7 of said formula (SEO ID No. 2) are reversed.
- 62. (Currently Amended) A carrier moiety according to claims 60, wherein the amino acid residue at position 3 or 7 of said formula (SEQ 1D No. 2) is replaced.
- 63. (Currently Amended) A carrier moiety according to claim 60, wherein the amino acid residue at position 3 of said formula (SEQ ID No. 2) is replaced.
- 64. (Currently Amended) A carrier moiety according to claim 61, wherein the order of the amino acid residue at position 3 or 7 of said formula (SEO ID No. 2) is

U.S.S.N.: 09/854,204

-5-

Group Art Unit: 1642

reversed.

- 65. (Currently Amended) A carrier moiety according to claim 61, wherein the order of the amino acid residue at position 3 of said formula (SEO 1D No. 2) is reversed.
- 66. (Currently Amended) A carrier moiety according to claims 49 or 50 wherein homologous replacement occurs at any of positions 1 and 2 of said formula (SEO ID No. 2).
- 67. (Currently Amended) A carrier moiety according to claims 51 or 53, wherein non-homologous replacement occurs at any of positions 3, 4, 5 and 6 of said formula (SEQ ID No. 2).
- 68. (Currently Amended) A carrier moiety according to claims 1, 49, 50, or 51, or 52, wherein more than one amino acid residue is two amino acid residues of said formula (SEQ ID No. 2) are replaced by homologous or non-homologous replacement.
- 69. (Currently Amended) A carrier moiety according to claim 68, wherein amino acid residues at positions 2 and 3 of said formula (SEQ ID No. 2) are replaced.
- 70. (Currently Amended) A carrier moiety according to claim 68, wherein amino acid residues at positions 4 and 5 of said formula (SEO ID No. 2) are replaced.
- 71. (Currently Amended) A carrier moiety according to claim 68, wherein amino acid residues at position 5 and 6 of said formula (SEQ ID No. 2) are replaced.
- 72. (New) A carrier moiety according to claim 53, wherein the halide derivative is selected from the group consisting of trifluorotyrosine\*, p-Cl-phenylalanine\*, p-Br-phenylalanine\*, and p-I-phenylalanine\*.
  - 73. (New) A carrier moiety according to claim 53, methyl derivative of

Aug-15-03 18:06

1

U.S.S.N.: 09/854,204

-6-

Group Art Unit: 1642

phenylalanine (Phe) is selected from the group consisting of 4-methyl-Phe\*, and pentamethyl-Phe\*.

- 74. (New) A carrier moiety of claims 1, wherein the free carboxyl group of the carboxy terminal amino acid residue is in the form -C(O)-NRR', wherein R and R' are each independently selected from the group consisting of: hydrogen, C1-6 alkyl, C1-6 alkylene or C1-6 alkynyl, aryl, each optionally substituted a heteroatom.
- 75. (New) A carrier moiety according to claim 74, wherein free carboxyl group of the carboxy terminal amino acid residue is a carboxamide group.